REMARKS

Claims 1-36 are currently pending in the subject application and are presently under consideration.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1-10 and 12-36 Under 35 U.S.C. § 103(a)

Claims 1-10 and 12-36 stand rejected to under 35 U.S.C. § 103(a) as being unpatentable over Joseph, *et al.* (US 6,807,274) in view of Bala (US 6,798,876) and further in view of Holt (US 5,896,448). It is requested that this rejection be withdrawn for at least the following reason. Joseph, *et al.*, Bala and Holt, either alone or in combination, do not disclose, teach, or suggest each and every element of the subject claims.

Applicants' subject specification relates to a system and method that employs dynamic policies for transferring callers from an automated call routing system to a human operator given the likelihood of success, the effort associated with continuing to interact with an automated system and the wait times associated with entering a queue for a human operator. In particular, independent claims 1, 19 and 20 recite similar aspects, namely, ***a likelihood of success determined based in part on a sequence of system actions associated with the incoming call and is re-determined after the occurrence of each system action.*** Joseph, *et al.* either alone or in combination with, Bala and/or Holt does not teach this novel aspect.

Joseph, *et al.* relates to an interactive voice response system for providing customer service that determines if a manual or automated dialogue is appropriate for an incoming call and routes the incoming call accordingly (*See Abstract*). Specifically, the system has the caller identify the task or problem the caller desires resolved, and the system performs a database look-up to determine whether the caller should be routed through the automated system or to a service representative, where the database can include statistical data representing past calls and success rates. (*See* col. 3, lns. 43-49,

59-62; col. 4, lns. 1-32). However, Joseph, *et al.* does not disclose a likelihood of success that is re-determined after a system action associated with the call.

Bala relates to a call routing system that directs an incoming call based on a profile of a caller, and a profile of a call center representative. Further, the system is updated based on experience to provide more accurate call routing (*See* col. 1, lns. 62-67). In particular, the system determines a product or service the customer is calling about and identifies customer service representatives who are qualified to handle the call. The representatives are ranked and the call is routed to the highest ranking representative. (*See* col. 2, lns. 33-36). Thus, Bala teaches routing a call to a customer service representative based on an analysis of the product or service the caller is calling about or previously stored information regarding a caller and/or a customer service representative's profile. However, unlike the claimed subject matter, Bala is silent with respect to determination of a likelihood of success in automatically routing an incoming call, where the likelihood of success is based on a sequence of system actions associated with the call. Further, Bala fails to teach or suggest re-evaluating the likelihood of success in automatically routing an incoming call after the occurrence of each system action. Rather, Bala teaches making a single determination regarding the service representative to which a call is to be routed (*See* col. 2, lns. 33-36).

The Examiner asserts on page 4 of the Final Office Action (dated September 25, 2007) that Holt teaches a system that determines a likelihood of success in automatically routing an incoming call and re-determines the likelihood after each system action. However, applicant's representative respectfully disagrees with the assertion. Holt, unlike the subject claims, teaches a likelihood of success that a user will be present at a destination (*See* col. 4, lns. 27-29). Holt does not teach determination of a likelihood of success in ***automatically routing an incoming call to mitigate transferring the incoming call to an operator***. Further, Holt determines a likelihood of success for each destination and for each call arranges the destinations in a routing list based on the number of calls that have successfully routed to the destinations (*See* col. 5, lns. 27-29). Specifically, when a call is received, the call is routed to a first destination in the routing list. If the call is not answered by the destination, the call is routed to the next destination in the list and a success counter associated with the first destination can be updated. However,

updating the counter does not update and/or modify the routing of the current incoming call. The current call is directed to the next destination in the list and the list is updated only after the call is complete. Thus, Holt fails to teach re-determination of the likelihood of success in automatically routing the incoming call, after the occurrence of each system action, to mitigate transferring the incoming call to an operator.

Applicants' claimed subject matter, in contrast, discloses a call routing system that can employ decision models to output policies for switching people from an ongoing automated system to a human operator based on context-sensitive analysis of the spoken dialog situation at hand. In particular, conditioning on a sequence of actions taken by a call routing system, a likelihood of success can be determined, that is, p(SpeakFound|E), wherein observational evidence E refers to all system actions taken so far, by counting the number of cases along the action sequence that resulted in success over the total number of cases along the sequence (*See* page 8, lns. 19-24). Thus, the likelihood of success can be determined based on a sequence of system actions (*e.g.*, operator introduction, requesting the name of the member sought, requesting the user to pick an option) associated with the incoming call. Further, after the occurrence of a system action in the sequence of system actions, the decision model can re-calculate the probability and ***re-determine the likelihood of success in automatically routing the incoming call*** given the current position of the incoming call in the sequence of system actions. The output of the decision model can be utilized by the automated call routing component to facilitate making a determination with regard to whether the incoming call should remain in the automated system or be routed to an operator, for example.

In view of at least the foregoing, it is readily apparent that Joseph, *et al.*, Bala and Holt, either alone or in combination, fail to disclose each and every aspect of the claimed subject matter as recited in independent claims 1, 19, and 20 (and associated dependent claims 2-10, 12-18, and 21-36). Accordingly, it is believed that the subject claims are in condition for allowance, and the rejection should be withdrawn.

II. Rejection of Claim 11 Under 35 U.S.C. § 103(a)

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Joseph, *et al.* (US 6,807,274) in view of Bala (US 6,798,876), in view of Holt (US

5,896,448) and further in view of Chittineni (US 4,747,054). It is requested that this rejection be withdrawn for at least the following reason. Joseph, *et al.*, Bala, Holt and Chittineni, alone or in combination, do not disclose, teach, or suggest each and every element of the claimed subject matter.

Claim 11 depends from independent claim 1. Chittineni relates to a process for defining similarities and differences between two signals that carry common information but have undergone differing response mechanisms (*See* col. 1, lns. 61-64) and fails to cure the aforementioned deficiencies of Joseph, *et al.*, Bala and Holt as to independent claim 1. Thus, it is believed that claim 11 is in condition for allowance, and the rejection as to claim 11 should be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063[MSFTP471US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN, TUROCY & CALVIN, LLP

/Himanshu S. Amin/
HIMANSHU S. AMIN
Reg. No. 40,894

AMIN, TUROCY & CALVIN, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731